



UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/760,229

01/21/2004

Kia Silverbrook

SMA02US

2206

24011

7590

02/06/2006

SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, NSW 2041
AUSTRALIA

EXAMINER

VO, ANH T N

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/760,229

Applicant(s)

SILVERBROOK ET AL.

Examiner

Anh T.N. Vo

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10 and 13 is/are rejected.
- 7) ☒ Claim(s) 5, 11, 12 and 14-23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/03/2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Information Disclosure Statement

The references cited on the PTOL 1449 form have been considered.

Claims Objection

Claims 1, 7 and 14 are objected to because of the following informalities:

* in claim 1, “and the cartridge , “ on line 5 should be deleted for avoiding redundant language.

* in claim 2, “a” on line 1 at second occurrence should be changed to --the--.

* in claim 7, the limitation “JPEG files” is unclear and what stands for.

* in claim 14, the word “its” on line 3 should be deleted, as the term “its” is indefinite and “In” on line 5 should be changed to --in--.

Appropriate correction is required.

Drawings Object to

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recitations “a digital processor” as recited in claim 1-2, 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Specification

The Applicant should remove the Attorney docket numbers from the specification and update the serial numbers to reflect any that have been patents.
Appropriate correction is required.

Double patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of US Pub. number 2005/0156970 and over claims 1-21 of US Pub. Number 2005/0156971. Although the conflicting claims are not identical, they are not patentably distinct from each other because they claim a cartridge for a digital photofinishing system comprising:

- a cartridge for a digital photofinishing system having a digital processor and a printer arranged to receive drive signals from the digital processor;
- the cartridge being arranged to be mounted removably in juxtaposition to the printer and comprising a roll of print media to be fed on demand to the printer;
- the cartridge incorporating means for coupling with a print media feed drive mechanism;
- a cartridge removably mounted to a digital photofinishing system in which the digital processor is arranged to receive digitised data that is representative of a photographic image and to process

Art Unit: 2861

the data in a manner to generate a printer drive signal that is representative of the photographic image, the printer being coupled to the digital processor and being arranged to process the drive signal and effect page-width printing of the photographic image on the print media;

- at least one replaceable printing fluid cartridge;
- wherein the print fluid cartridge is refillable;
- wherein the roll of print media is removably mounted to a tubular core of the cartridge and wherein the at least one refillable printing fluid-containing secondary cartridge is removably located within the tubular core;
- wherein the digital processor is arranged to receive said digitised data from an input source selected from a scanning device, a computer disk, a digital camera output, a digital camera memory card, a digital file and an internet connection;
- wherein said digitised data is input to the digital processor as a standardised image compression signal and processed as JPEG files;
- wherein the printer comprises at least one print head assembly;
- wherein the printer comprises two confronting, spaced-apart print head assemblies;
- wherein the print head assemblies are arranged selectively to direct printing fluid onto at least one face of print media from the roll of print media;
- wherein each print head assembly comprises at least one print head module, each of which comprises a unitary arrangement of: a) a support member, b) at least four micro-electromechanical integrated circuit print head chips, each of which has a plurality of nozzles to and from which the printing fluid is delivered, c) a fluid distribution arrangement mounting each of the print head chips to the support member, and d) a connector for connecting electrical power and signals to each of the print head chips;
- wherein the at least one print head module is removably located in a channel portion of a casing and wherein the casing contains electrical circuitry for controlling delivery of electrical power and drive signals to the print head chips by way of the connector;
- wherein a drier means is located in series with the printer, the drier means being arranged to receive printed media directly from the printer and comprising: a) guide rollers for transporting the print media through the drier means, and b) at least one blower arranged to direct drying air onto at least one face of print media as it is transported through the dryer means;

Art Unit: 2861

- wherein a slitter means is located in series with the printer, the slitter means being arranged to receive printed media following its passage through the printer, to transport the printed media in a longitudinal direction away from the printer and to slit the printed media in the longitudinal direction of transportation of the printed media;
- wherein the slitter means comprises: a) guide rollers for transporting the print media through the slitter means, b) spaced-apart slitting blades mounted on rotatable shafts, and c) a rotatable, selectively positional turret supporting the rotatable shafts;
- wherein a guillotine is mounted to the slitter means, the guillotine being selectively actuatable to cut the print media at selected intervals;
- wherein the processor and the printer are mounted to a support structure and wherein the cartridge is removably mounted to the support structure;
- wherein the support structure includes a compartment and the cartridge is removably located in the compartment;
- wherein print media feed means are located in the cartridge and drive means are provided on the support structure and are arranged to couple with the feed means to effect feeding of the print media through the printer when the primary cartridge is mounted to the support structure.
- wherein a paper feed drive mechanism is mounted to the compartment and is arranged to engage a said roll of the print media;
- wherein a door is provided in a wall portion of the cartridge and wherein the door is arranged to be opened to enable the paper feed drive mechanism to engage the roll of print media;
- wherein the paper feed drive mechanism comprises a pivotal carrier, a first drive motor arranged to impart pivotal drive to the carrier, a primary drive roller mounted to the carrier and arranged to engage the roll of print media when the door in the primary cartridge is open, and a second drive motor arranged to impart rotary drive to the primary roller; and
- wherein the print media feed means include a drive roller and a pinch roller, and wherein the drive means comprises a third drive motor which is mounted to the support structure.

This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

CLAIM REJECTIONS

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 6 are rejected under 35 USC 102 (b) as being anticipated by Moghadam et al. (US Pat. 5,799,219).

Moghadam et al. disclose in Figures 1-9 a photofinishing center comprising:

- a cartridge (26) for a digital photofinishing system having a digital processor (22) and a printer (28) arranged to receive drive signals from the digital processor (22) (Figure 2);
- the cartridge (26) being arranged to be mounted removably in juxtaposition to the printer (28) and comprising a roll of print media (20) to be fed on demand to the printer (28) and the cartridge (20 or 118) incorporating means (not shown) for coupling with a print media feed drive mechanism (120) (Figures 1-2 and 8);
- the cartridge (20) removably mounted to a digital photofinishing system in which the digital processor (22) is arranged to receive digitised data that is representative of a photographic image and to process the data in a manner to generate a printer drive signal that is representative of the photographic image, the printer (38) being coupled to the digital processor (22) and being arranged to process the drive signal and effect page-width printing of the photographic image on the print media (10) (Figures 1-2, column 4, lines 3-23); and
- wherein the digital processor (22 or 108) is arranged to receive said digitised data from an input source selected from a digital camera output (110) and an internet connection (111) (Figures 1-2 and 8).

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-10, and 13 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Silverbrook et al. (US Pat. 6,347,864) in view of Moghadam et al. (US Pat. 5,799,219).

Silverbrook et al. disclose in Figures 1-2 a print engine comprising:

- a cartridge (504) for a digital photofinishing system having a digital processor (721) and a printer (28) arranged to receive drive signals from the digital processor (22) (Figure 2);
- the cartridge (26) being arranged to be mounted removably in juxtaposition to the printer (28) and comprising a roll of print media (20) to be fed on demand to the printer (28) and the cartridge (20 or 118) incorporating means (not shown) for coupling with a print media feed drive mechanism (120) (Figures 1-2 and 8);
- the cartridge (20) removably mounted to a digital photofinishing system in which the digital processor (22) is arranged to receive digitised data that is representative of a photographic image and to process the data in a manner to generate a printer drive signal that is representative of the photographic image, the printer (38) being coupled to the digital processor (22) and being arranged to process the drive signal and effect page-width printing of the photographic image on the print media (10) (Figures 1-2, column 4, lines 3-23);
- the cartridge (504) incorporating at least one replaceable printing fluid cartridge (548) (Figure 5);
- wherein the print fluid cartridge (548) is refillable (Figure 5);
- the cartridge (504) being arranged to be mounted removably in juxtaposition to the printer

(516) and comprising a roll of print media (542) to be fed on demand to the printer (516) and the cartridge (504) incorporating means (not shown) for coupling with a print media feed drive mechanism (536) (Figure 5);

wherein said digitised data is input to the digital processor as a standardised image compression signal and processed as JPEG files;

- wherein the printer comprises at least one print head assembly (508) (Figure 2);
- wherein the printer comprises two confronting, spaced-apart print head assemblies (Figure 2); and
- wherein the print head assemblies (508) are arranged selectively to direct printing fluid onto at least one face of print media from the roll of print media (542) (Figure 5).

However, Silverbrook et al. do not disclose a cartridge for a digital photofinishing system having a digital processor and a printer arranged to receive drive signals from the digital processor; the cartridge removably mounted to a digital photofinishing system in which the digital processor is arranged to receive digitised data that is representative of a photographic image and to process the data in a manner to generate a printer drive signal that is representative of the photographic image, the printer being coupled to the digital processor and being arranged to process the drive signal and effect page-width printing of the photographic image on the print media; and wherein the digital processor is arranged to receive said digitised data from an input source selected from a digital camera output and an internet connection.

Moghadam et al. disclose in Figures 1-9 a photofinishing center comprising:

- a cartridge (26) for a digital photofinishing system having a digital processor (22) and a printer (28) arranged to receive drive signals from the digital processor (22) (Figure 2);
- the cartridge (20) removably mounted to a digital photofinishing system in which the digital processor (22) is arranged to receive digitised data that is representative of a photographic image and to process the data in a manner to generate a printer drive signal that is representative of the photographic image, the printer (38) being coupled to the digital processor (22) and being arranged to process the drive signal and effect page-width printing of the photographic image on

Art Unit: 2861

the print media (10) (Figures 1-2, column 4, lines 3-23); and
-6 wherein the digital processor (22 or 108) is arranged to receive said digitised data from an input source selected from a digital camera output (110) and an internet connection (111) (Figures 1-2 and 8).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Moghadam et al. in the Silverbrook print engine for the purpose of providing a film finishing system to digitize the images being developed on film.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These prior art references (US Pat. 5,300,974; US Pat. 5,706,097; US Pat. 6,375,314; Pub. No.:US 2005/0024690) cited in the PTO 892 form show a digitizing cartridge that is deemed to be relevant to the present invention. These references should be reviewed.

Allowable Subject Matter

Claim 5 would be allowable if provided a terminal disclaimer and rewritten in independent form including all of the limitations of the base claim and any intervening claims. This claim is allowed because the prior art does not teach a cartridge for a digital photofinishing system comprising a roll of print media that is removably mounted to a tubular core of the cartridge and wherein the at least one refillable printing fluid-containing secondary cartridge is removably located within the tubular core in the combination as claimed.

Claims 11- 12 would be allowable if provided a terminal disclaimer and rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims are allowed because the prior art does not teach a cartridge for a digital photofinishing system comprising each print head assembly that has at least one print head

Art Unit: 2861

module, each of which comprises a unitary arrangement of: a) a support member, b) at least four micro-electromechanical integrated circuit print head chips, each of which has a plurality of nozzles to and from which the printing fluid is delivered, c) a fluid distribution arrangement mounting each of the print head chips to the support member, and d) a connector for connecting electrical power and signals to each of the print head chips in the combination as claimed.

Claim 13 would be allowable if provided a terminal disclaimer and rewritten in independent form including all of the limitations of the base claim and any intervening claims. This claim is allowed because the prior art does not teach a cartridge for a digital photofinishing system comprising a drier means that is located in series with a printer, the drier means being arranged to receive printed media directly from the printer and comprising: a) guide rollers for transporting the print media through the drier means, and b) at least one blower arranged to direct drying air onto at least one face of print media as it is transported through the dryer means in the combination as claimed.

Claims 14-16 would be allowable if provided a terminal disclaimer and rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims are allowed because the prior art does not teach a cartridge for a digital photofinishing system comprising a slitter means that is located in series with the printer, the slitter means being arranged to receive printed media following its passage through the printer, to transport the printed media in a longitudinal direction away from the printer and to slit the printed media in the longitudinal direction of transportation of the printed media in the combination as claimed.

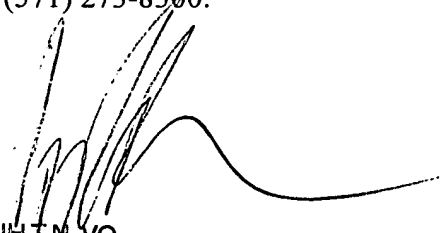
Claims 17-23 would be allowable if provided a terminal disclaimer and rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims are allowed because the prior art does not teach a cartridge for a digital photofinishing system comprising the processor and the printer are mounted to a support structure and wherein the cartridge is removably mounted to the support structure in the combination as claimed.

Art Unit: 2861

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo. whose telephone number is (571) 272-2262. The examiner can normally be reached on Monday to Friday from 9:00 A.M. to 7:00 P.M.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 273-8300.



ANH T.N. VO
PRIMARY EXAMINER

January 27, 2006